

But I cannot help asking your Opinion and begging you to consider, Whether, upon the Whole, the Virtues of this Medicine may not reasonably be thought to extend to many other Cases; and particularly to the Epilepsy and Plague. But, whatever Judgment you may form of the Medicine which common Good-will to my Fellow-creatures obliges me to recommend to your Thoughts, I intreat, and hope, you will pardon my Presumption in going so far beyond my own Province; seeing I shall always be, with the highest Esteem, and sincerest Respect,

Dear Sir,

Your most obliged, and

and most obedient Servant,

Andr. Reid.

XIX. De Planta minus cognita, & hactenus non descripta, Commentarius: Auctore *Gulielmo Watſon*, REGIÆ SOCIETATIS Sodale.

GEASTER Volvæ Radiis & Operculo elevatis.

*Read in English
Dec. 20. 1744.
here printed with
Alterations.*

GEASTER appellatur plantarum genus a *Michelio* constructum; cujus quinque species accuratissimus idem auctor detexit, atque in tractatu suo de novis plantarum generibus

generibus adumbravit. Denominatur autem ex idiomate Græco (γῆν terra, & ἀστὴρ stella), propter angulos quosdam acutiores e centro radiatim excurrentes in omnibus hujus plantæ speciebus, eo ritu, quo stellarum conruscationes in pictura effinguntur.

Cum Lycoperdo (a) *Tournefortii* & (b) *Linnaei*, vel Bovista (c) *Dillenii*, cum (d) Lycoperdoide, Lycoperdastro, & (e) Carpobolo *Michelii*, proximam affinitatem obtinet hocce genus. (f) *Linnaeus* etiam, necnon in generibus a *Linnaeo* datis (laudabili sane instituto) sectator ejus (g) *Royenus*, omnes has plantas sub Lycoperdi nomine generico complexi sunt. Salva tamen reverentia, qua eximios istos in arte botanica viros colam, quorum legibus, in omnium fere plantarum generibus a sola fructificatione firmandis, licet in cæteris partibus minime convenient, arcte adhæreo; in multis certe tam ex *Linnaei* Cryptogamiis, quam ex *Royeni* Cryptantheris, ad habitum plantarum, etiam in generibus constituendis, spectare oportet; idque in Fungis, Fucis, Algis, forsitan & in Capillaribus, maxime necessarium esse videtur.

Ad descriptionem mirificæ hujus plantæ concinnandam, in tres partes distrahere lubuit, Volvam scilicet, Operculum, & Fructificationem; quas seorsim tradere nunc aggrediar.

Volva (ut non cum *Plinio* tantum, sed & *Clusio*, aliisque recentioribus loquar) concava est, calycis formam repræsentans, cujus diameter sesquipollicem æquat. Lata huic calyci adest basis, e centro cujus,
dum

(a) Instit. R. Herb. p. 563. (b) Linn. Gen. Plant. p. 510.
(c) Cat. Giff. p. 196. (d) Michel. nova Plant. Gen. p. 221. (e) Ib. d.
(f) Linn. Gen. 510. H. Cliffort. p. 479. (g) Flor. Leydens.
Prod. p. 518.

dum adhuc planta adolescat, radículas fibrosas, raras ramen more gentis, emittit, eidem nutrimentum subministrantes. Cum vero toti huic stirpium familiæ humiditas minime sit grata, radiculæ una cum volvæ centro, cuierant infixæ, antequam ad maturitatem perveniat planta, marcescunt; qua de causa in basis fundo foramen conspicitur. Volva autem, postquam ad tertiam pollicis partem surrexerit, fit quadrifida, laciniis gaudens obtuse lanceolatis, ad apices parum reflexis, ad margines vero integris. Huic volvæ vis elastica tribuitur; color externus est cinereus cum superficie inæquali, internus vero lævis & albicans.

A singulis volvæ laciniarum reflexarum apicibus pars plantæ assurgit, quam operculum voco. Ab hoc a commissuris cum volva sensim se extendente, bini conflantur fornices ad angulos rectos intercurrentes, quorum altitudo a volvæ laciniis sesquipollicem parum superat. Operculi densitas & crassitudo corticem Cinnamomi æmulantur; ad margines nonnihil sese invertit; color introrsum albicat, extrorsum flavo rubescit. His addatur, quod membrana quædam fusca, impariter quadripartita, fornices utriusque culmini adhæret.

Ex operculi centro jam descripti, pediculo quartam circiter pollicis partem alto sustentatum eminet pericarpium, oblate globosum, colore fuscum, ad pollicis duas partes tertias latum, capitello papaverino æmulum. Foramen circulare hujus pericarpium summum culmen occupat, in quo cernuntur lamellæ quædam per longitudinem totam intus parietibus pericarpium adnatæ, materia lanuginosa quadam confertæ, quibus tanquam placentis adhærent sub pulveris subtilissimi forma, semina numerosa.

Multis forte rei herbariæ scientiæ imbutis cognitu difficillimum videatur, quibus modis, dum planta adhuc vigeat, operculo & pericarpio idoneum suppeditatur nutrimentum. His igitur notatu dignum sit, quod in plantæ statu teneriore, volva & operculum cum radiis suis humi procumbunt, piscibus fœliæ marinæ dictis haud absimilia, materiaque quadam gelatinosa simul conjuncta, cujus ope una cum pericarpio ac semine nutriuntur. In hoc situ dantur omnes Geastri species a laudato *Michelio* propositæ; pariter ac *Fungus Crepitus Lupi dictus coronatus & inferne stellatus*, ab egregio (a) *Raio* nostro primum memoratus, cujus in tertia Synopseos Stirpium Britannicarum (b) editione icon exhibetur. Maturo autem semine, gelatinosa materia quæ volvam & operculum intercurrit jam arefcit. Hinc rigida fiunt & elastica; quæ de causa, si contactus ad laciniarum apices demas, divisa cernuntur. His ita effectis consurgunt sensim volvæ radii, operculum, & fructus, turriculamque fornicatum tota planta proxime repræsentat. Hic ratiocinandi modus (crescentem enim perscrutandi facultas nemini adhuc fuit concessa) vix ullum dubium admittit; cum non sabulum tantum, sed etiam lapillum, hoc ipso tempore conspicuum, complectitur volvæ tunica exterior rugis obsita. Quin auctoritate etiam *Micheliana* certiores facti sumus, (c) *Carpobolum* (Geastro, ut supra dixi, valde affinem) non operculum tantum ex cavo ad convexum sublevare posse, momento vero temporis ea violentia hoc effici, ut fructum suum parvum ac globosum in altum ejaculetur.

Hujus

(a) *Raii Synops. Edit. 2d. p. 16.*
nova Plant. Gen. TAB. 101.

(b) *TAB. I.*

(c) *Michelii*

Hujus plantæ exemplaria duo, nec plura videre contigit, communicavit mecum amicitia conjunctissimus *Robertus Nicholls* pharmacopæus *Londinensis*, primi subsellii botanicus; cujus non tantum ardorem, sed etiam ingenium scientiam naturalem promovendo, multoties ipse fui expertus. Majus horum, haud procul a *Reading*, — *Merrick*, M. D. collegit; minus vero prope *Wickham* in agro *Cantiano* nascebatur. Sub *Martii* mensis finem ambo provenerunt.

TAB. II. *Fig. 11.*

- A.* Pericarpium.
- B.* Operculum.
- C.* Volva.

Fig. 12.

- Pericarpium antice visum; cujus
- A.* Foramen circulare.

ERRATA.

In *Page* 198, *Line* 13. for *Abductores* read *Ad-
ductores*. *P.* 172, *l.* 28. for *b*, read *ib.* *P.* 200, for
XV. read XVI. *P.* 225, for *Alex.* read *Andr.*

Fig. 1. p. 158.

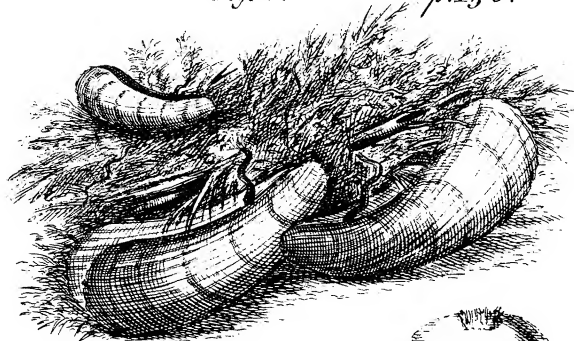


Fig. 2. p. 160.

IMP. CAES. M. AVREI
SEVERO ANTONINO
PIO FELICI. X. G. PARTH.
MAX. BRIT. MAX. GERM.
MAX. PONTIFICI. MAX.
TRIB. POTEST. XVIII. IMI
COS. IIII. PROCOS. PP. CC
FIDA VARDVL. CREO
NNANA. FECIT. SVB. CV
LEG. XX

Fig. 11. p. 238.

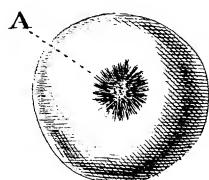
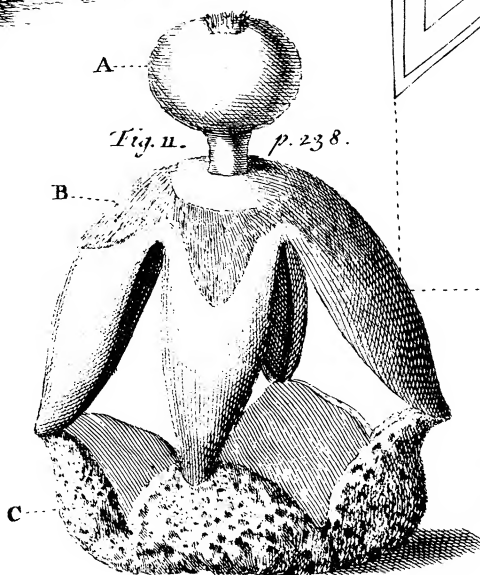


Fig. 12. p. 238.

Fig. 10. p. 208.

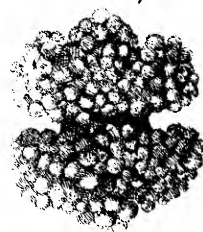
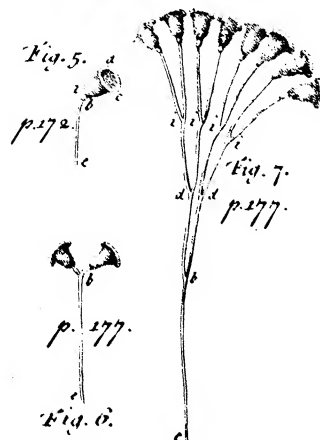
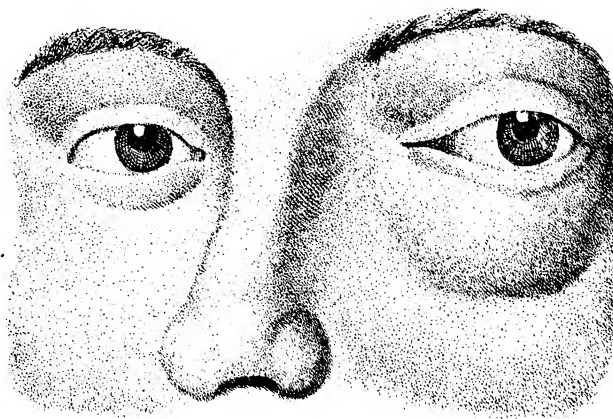


Fig. 8. p. 195. 200.



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B·CVRAICO
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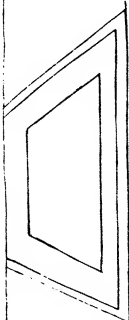


Fig. 3. p. 160.

MARTI
VICTORI
VLIVS LI
IVS TRIE
V·S·L·M·

Fig. 4. p. 160.

FORTVNAE
A V G
A E T
PROCVLINA
V S

Fig. 5 p. 201.

DEO·HER
SAEG O N
T·TAMMON
SAEN·TAMMON
VITALIS
HONC

Fig. 1.



Fig. 2.



Fig. 3.



Fig. 4.



Fig. 5.

IMPCAESM AVRELIO
SEVERO ANTONINO
PIO FELICINO PARTHIC-
MAX BRIT MAX GERMAN-
MAX PONTIFICO MAXIM-
TRIB POTEST EMILPPH-
COS IMPRODS PP CON-
FIDA VRQVL CREOBANO
NNAWFFCIT SVB CYRANO
LEDXGR

Fig. 6.



Fig. 8.

MARTI
VICTORI
VIRGO
MEX
VIRGO

Fig. 9.

FORTYNAE
VIRGO
MEX
VIRGO

Fig. 10.

DEO HER
SAEG ON
TTAMMON
SANTAMMON
& VITALIS
HONG